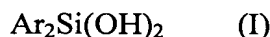


Amendments to the Claims

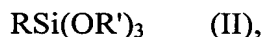
This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~Organically modified, stable in storage, UV curable, NIR permeable~~ A silicic acid polycondensate which is photostructurable in layers having a thickness of 1 to 150 μ m, obtainable produced by condensation of condensing one or more organically modified silanediols of the general formula I ~~and/or precondensates derived therefrom~~



with one or more organically modified silanes of the general formula II

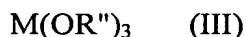


wherein said condensation occurs is performed without the addition of water,
 wherein the molar ratio of said organically modified silanediols of general formula the compounds I and to said organically modified silanes of the general formula II which form the resulting silicic acid polycondensate in relation to the monomers is 1 : 1,
 wherein up to 90 mole percent of said ~~compound~~ silane of formula II can be replaced by one or more co-condensable compounds selected from the group consisting of boron, aluminum, silicon, germanium, titanium and zirconium,
 and wherein the substituents Ar, R and R' on said organically modified silanediols of general formula I and said organically modified silanes of general formula II radicals are identical or different and have the following ~~meaning~~ meanings:

- Ar = a radical having 6 to 20 carbon atoms and at least one aromatic group,
 R = an organic radical having 2 to 15 carbon atoms and at least one epoxy group and/or at least one C=C double bond,
 R' = methyl or ethyl,

said polycondensate further comprising a photoinitiator in a quantity effective for photochemical curing via UV.

2. (Currently Amended) ~~Silicic~~ The silicic acid polycondensate according to claim 1, wherein said one or more co-condensable compounds comprise up to 90 mole percent of said compound of the general formula II are replaced by one or more compounds of the general formula III,

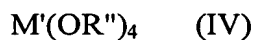


in which M ~~means one of~~ is boron ~~and~~ or aluminum, R'' represents an alkyl radical with 1 to 4 carbon atoms, and wherein the said organically modified silanediols of general formula I and said organically modified silanes of general formula II and said one or more co-condensable compounds of general formula (III) are present in a molar ratio in the resulting silicic acid polycondensate according to the following equation:

$$(I):(II):(III) = 1 : (1-x_{III}) : \frac{2}{3}x_{III}$$

wherein x_{III} is from greater than zero to 0.9
~~of said replaced compound II in relation to said compound III is 3 : 2.~~

3. (Currently Amended) ~~Silicic~~ The silicic acid polycondensate according to claim 1, wherein said one or more co-condensable compounds comprise up to 90 mole percent of said compound of the general formula II are replaced by one or more compounds of the general formula IV:



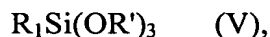
in which M' ~~means~~ is silicon, germanium, titanium or zirconium, R'' represents an alkyl radical having 1 to 4 carbon atoms, and wherein the said organically modified silane diols of general formula I and said organically modified silanes of general formula II and said one or more co-condensable compounds of general formula IV are present in a molar ratio in the resulting silicic acid polycondensate according to the following equation:

$$(I):(II):(IV) = 1 : (1-x_{IV}) : \frac{1}{2} x_{IV};$$

wherein x_{IV} is from greater than zero to 0.9

~~of said replaced compound II in relation to said compound IV is 2 : 1.~~

4. (Currently Amended) ~~Silicic~~ The silicic acid polycondensate according to claim 1, wherein said one or more co-condensable compounds comprise up to 90 mole percent of said compound of the general formula II are replaced by one or more compounds of the general formula V_3 , ~~wherein the molar ratio of said replaced compound II in relation to compound V is 1 : 1,~~



~~and~~ wherein the radicals are identical or different and have the following meanings meaning:

R' = methyl or ethyl,

R^1 = $CF_3-(CF_2)_n-C_2H_4-$, with $n = 0$ to 7 ,

$R_2HN-(CH_2)_3-$, with $R_2 = H, CH_3, C_2H_5$ or $C_2H_4-NHR_2$,

$H_2N-C_2H_4-NH-CH_2-C_6H_4-C_2H_4-$,

substituted and unsubstituted alkyl having 1 to 8 carbon atoms,

substituted and unsubstituted phenyl, tolyl and naphthyl,

wherein said R^1 radicals may contain SH groups and/or NR^*_2 groups, where R^* is hydrogen or alkyl,

and wherein said organically modified silanediols of general formula I and said organically modified silanes of general formula II and said one or more co-condensable compounds of general formula (V) are present in a molar ratio in the resulting silicic acid polycondensate according to the following equation:

$$(I): (II): (V) = 1: (1-x_V): x_V,$$

wherein x_V is from greater than zero to 0.9.

5. (Currently Amended) ~~Silicic~~ The silicic acid polycondensate according to claim ~~[[1]]~~ 2, wherein x_{III} is from greater than zero to 0.8 up to 80 mole percent of said

~~compound II are replaced by more than one compound selected from the group consisting of more than one compound of general formula III, more than one compound of general formula IV, more than one compound of general formula V, compounds of general formula III and IV, compounds of general formula III and V, compounds of general formula IV and V and compounds of general formula III and IV and V.~~

6. (Currently Amended) ~~Silicic~~ The silicic acid polycondensate according to claim 1, ~~obtainable by using wherein the condensing of said one or more organically modified silanediols of general formula I with said one or more organically modified silanes of general formula II is performed in the presence of~~ a condensation catalyst which is selected from the group consisting of ~~which is~~ triethylamine, NH_4F ~~or~~ and an alkaline earth hydroxide.

7. (Currently Amended) ~~Silicic~~ The silicic acid polycondensate according to any one of claims 2, 3 or 4 ~~claim 1, obtainable by wherein said~~ compounds ~~selected from those~~ of the general formula III, IV (with M' being Ti or Zr) or V (with R^1 being $\text{R}^2\text{HN}-(\text{CH}_2)_3-$, where $\text{R}^2 = \text{H}, \text{CH}_3, \text{C}_2\text{H}_5$, or $\text{H}_2\text{N}-\text{C}_2\text{H}_4-\text{NH}_2-\text{CH}_2-\text{C}_6\text{H}_4-\text{C}_2\text{H}_4-$) ~~acting act~~ as condensation catalysts.

8. (Currently Amended) ~~Silicic~~ The silicic acid polycondensate according to claim 1, wherein ~~said radical~~ Ar of said organically modified silanediols of the general formula I ~~means is~~ a substituted aromatic radical group.

9. (Currently Amended) ~~Silicic~~ The silicic acid polycondensate according to claim 1 ~~[[8]]~~, wherein ~~said radical~~ Ar of said organically modified silanediols of the general formula I ~~means is~~ a phenyl, naphthyl or styryl group.

10. (Canceled)

11. (Currently Amended) ~~Silicic~~ The silicic acid polycondensate according to claim 1, wherein said radical R¹ of the general formula V contains SH groups and/or NR*₂ groups, ~~with where R* being is~~ hydrogen or alkyl.

12. (Currently Amended) ~~Silicic~~ The silicic acid polycondensate according to claim 1, wherein said at least one C=C double bond in said radical R on said one or more organically modified silanes of the general formula II is the C=C double bond of ~~contains at least one an~~ acryl and/or a methacryl group.

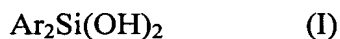
13. (Currently Amended) ~~Silicic~~ The silicic acid polycondensate according to claim 1, ~~obtainable~~ produced by adding polysiloxanes to the reaction medium, wherein said polysiloxanes ~~having been obtained~~ are produced by reacting organically modified silanediols of the general formula I with organically modified silanes of the general formula II.

14. (Currently Amended) ~~A stable in storage, UV curable, NIR permeable~~ material that is photostructurable in layers of a thickness of 1 to 150 μm, wherein said material comprises a silicic acid polycondensate according to claim 1.

15. (Canceled)

16. (Currently Amended) ~~Method~~ A method for producing the silicic acid polycondensates according to claim 1, comprising the steps of:

(a) ~~by~~ condensing one or more organically modified silanediols of the general formula I ~~and/or precondensates derived therefrom~~



with one or more organically modified silanes of the general formula II



in the presence of a base, and

(b) adding a photoinitiator, wherein said condensation is performed ~~occurs~~ without the addition of water, wherein the molar ratio ~~of the compounds of said organically modified silanediols of the general formula I to said organically modified silanes of the genral~~

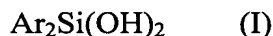
formula II in the resulting silicic acid polycondensate I and II in relation to the monomers is 1 : 1,

wherein up to 90 mole percent of said compound II can be replaced by one or more co-condensable compounds selected from the group consisting of boron, aluminum, silicon, germanium, titanium and zirconium,

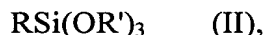
and wherein the radicals are identical or different and have the following meaning:

- Ar = a radical having 6 to 20 carbon atoms and at least one aromatic group,
 R = an organic radical having 2 to 15 carbon atoms and at least one epoxy group and/or at least one C=C double bond,
 R' = methyl or ethyl.

17. (Currently Amended) ~~Silicic~~ The silicic acid polycondensate, obtainable produced by condensation condensing of one or more organically modified silanediols of the general formula I ~~and/or precondensates derived therefrom~~



with one or more organically modified silanes of the general formula II



wherein condensation ~~occurs~~ is performed without the addition of water,

wherein the molar ratio of ~~the compounds~~ said organically modified silanediols of the general formula I to said organically modified silanes of the general formula II in the resulting silicic acid polycondensate I and II in relation to the monomers is 1 : 1,

wherein up to 90 mole percent of said ~~compound~~ silanes of formula II can be replaced by one or more co-condensable compounds selected from the group consisting of boron, aluminum, silicon, germanium, titanium and zirconium,

and wherein ~~the radicals~~ Ar, R and R' are identical or different and have the following meaning meanings:

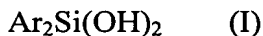
- Ar = a radical having 6 to 20 carbon atoms and at least one aromatic group,

R = an organic radical having 2 to 15 carbon atoms and at least one epoxy group and/or at least one C=C double bond, and

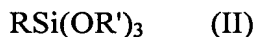
R' = methyl or ethyl.

18. (Presently Presented) A material that is photostructurable in layers of a thickness of 1 to 150 μm , wherein said material comprises an organically modified silicic acid polycondensate according to claim 17.

19. (Currently Amended) ~~Method A~~ method for producing the silicic acid polycondensates according to claim 17 by condensing one or more organically modified silanediols of the general formula I and/or precondensates derived therefrom



with one or more organically modified silanes of the general formula II



in the presence of a base,

wherein condensation is performed ~~occurs~~ without the addition of water,

wherein the molar ratio of said organically modified silanediols of general formula I to said organically modified silanes of general formula II in the resulting silicic acid polycondensate ~~the compounds I and II in relation to the monomers~~ is 1 : 1,

wherein up to 90 mole percent of said compound II can be replaced by one or more co-condensable compounds selected from the group consisting of boron, aluminum, silicon, germanium, titanium and zirconium,

and wherein the radicals are identical or different and have the following meaning:

Ar = a radical having 6 to 20 carbon atoms and at least one aromatic group,

R = an organic radical having 2 to 15 carbon atoms and at least one epoxy group and/or at least one C=C double bond,

R' = methyl or ethyl.

20. (New) The silicic acid polycondensate of claim 3, wherein x_{IV} is from greater than zero to 0.8.

21. (New) The silicic acid polycondensate of claim 4, wherein x_v is from greater than zero to 0.8.
22. (New) The material of claim 14, wherein said material is stable in storage.
23. (New) The material of claim 14, wherein said material is NIR permeable.
24. (New) The silicic acid polycondensate of claim 12, wherein said silicic acid polycondensate contains at least one acryl and/or methacryl group.